

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-11. (canceled)

12. (previously presented) A stent delivery system, said system comprising:
a catheter comprising a catheter body having a distal end, a proximal end and a lumen;
a balloon disposed near said catheter body distal end;
a stent having a wall comprising struts and connectors forming multiple passageways and further comprising a side hole, said stent disposed over said balloon;
an ultrasound transducer housing having a distal end, a proximal end, and a passage extending through a central portion of said housing between said distal and proximal ends, said housing having a transducer coupled thereto; and
a positioning guidewire at least partially disposed in said catheter lumen, said guidewire passing through said transducer housing passage.

13-22. (canceled)

23. (previously presented) A stent delivery system for use in a body lumen, the body lumen including a main vessel and a branch vessel, the branch vessel including an ostium, the system comprising:
a catheter comprising an elongate catheter body having a distal end, a proximal end, and a lumen;
an expansion device disposed near the catheter body distal end;
a stent having a wall comprising struts and connectors forming multiple passageways and further comprising a side opening, the stent being disposed around the expansion device; and
an ultrasound transducer positioned within the stent in axial and radial alignment with the side opening of the stent and configured to transmit and receive ultrasound signals through the side opening to align the side opening relative to the ostium of the branch vessel.

24. (canceled)

25. (previously presented) The system of claim 23 further comprising an transducer housing having a distal end, a proximal end, and a passage extending through a central portion of the housing between the distal and proximal ends, the transducer housing having the ultrasonic transducer positioned thereon.

26. (currently amended) A stent delivery system for treatment of a vessel bifurcation, the vessel bifurcation including a main vessel and a branch vessel, the branch vessel having an ostium, the system comprising:

a stent having a wall ~~comprising~~ defining a side opening between proximal and distal ends of the stent; and

an ultrasound transducer positioned within the stent in axial and radial alignment with the side opening and configured to transmit and receive ultrasound signals through the side opening to align the side opening relative to the ostium of the branch vessel.

27. (canceled)

28. (previously presented) The system of claim 26 further comprising an transducer housing having a distal end, a proximal end, and a passage extending generally through a central portion of the housing between the distal and proximal ends, the transducer housing having the ultrasonic transducer positioned thereon.

29-37. (canceled)